



INVASIVE PLANT MANAGEMENT PROGRAM 2011 WORK PLAN **UPDATE**

Invasive plant management in Yosemite National Park is based upon Integrated Pest Management, the practical experience of resource managers, and the best available science. The Finding of No Significant Impact for the *2010 Invasive Plant Management Plan Update* (IPMP Update) was signed in August of 2011. This work plan update clarifies how adopting the new guidance document will affect the IPM activities in Yosemite for the remainder of the field season in 2011.

Comments are welcome. Please address them to:

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For more information about invasive plants in Yosemite, please visit:
<http://www.nps.gov/yose/naturescience/invasive-plants.htm>

INTRODUCTION

The purpose of the Invasive Plant Program (IPP) is to protect Yosemite National Park's natural and cultural resources from displacement by non-native invasive plants. Yosemite's large size, just over three quarters of a million acres, makes surveying for and treating invasive plants logistically difficult. This is especially true in the 95% of the park that is designated wilderness. The threat from invasive species is growing and new invasive plant species and populations are found and treated each year. Limited operational resources for invasive plant control make it critical that treatments are efficient, effective and guided by a strategically sound plan.

Between 2008 and July of 2011, invasive plant management in Yosemite National Park was guided by the *2008 Invasive Plant Management Plan (2008 IPMP)*. In August of 2011 an update to that document, the *2010 Update*, was completed. The *2010 Update Finding of No Significant Impact* was approved and signed by the Regional Director on August 3, 2011. These documents can be found at: http://www.nps.gov/yose/parkmgmt/invasive_docs.htm, and via the park's invasive plant website at <http://www.nps.gov/yose/naturescience/invasive-plants.htm>.

This work plan update clarifies how adopting the new guidance document will affect invasive plant management in Yosemite for the remainder of the 2011 field season. Species are prioritized for control based on the risk they pose to park resources relative to the program's ability to obtain the monetary and personnel resources necessary to mitigate their threat. High priority species pose the greatest risk to Yosemite's natural and cultural resources, and are treated before medium or low priority invasive species. Early detection and eradication allows populations to be efficiently controlled while they are still small, and minimizes the risk of further spread. Again, because operational resources are limited, crews only manage the species that most seriously threaten park natural and cultural resources. Newly discovered invasive plant species and populations may receive elevated priority for control.

Resource managers conduct ongoing internal consultation with other park branches, associated American Indian tribes and groups, and where necessary, the US Fish and Wildlife Service, during the invasive plant management process. Managers then develop appropriate treatment strategies based upon location, proximity to sensitive resources, plant phenology, and the availability of methods known to be effective and permitted under the IPMP.

OVERVIEW OF MAJOR CHANGES TO 2011 WORK PLAN

The NPS will implement the selected alternative: *Alternative 2: Add Four Herbicides and Address Limitations in the 2008 IPMP EA* beginning in September of 2011. A FONSI, Errata Sheets, Public Comment and Response Report and Minimum Requirements Analysis have been prepared to document changes and clarifications made to the plan and Selected Alternative, based on comments received on the EA from agencies, American Indian tribes and groups, and the public. (These documents, with the full details of the updated program are available to the public, and will be distributed via the established IPMP update mailing list, and they will be posted on the WWW).

The implementation of the IPMP Update FONSI will lead to the following changes to the invasive plant operations in 2011:

NPS crews may now control priority invasive plants within the bed and banks of Wild and Scenic Rivers and in other areas near water using aquatic formulations of approved herbicides.

- NPS crews will begin with the removal of the 13 acres of Himalayan blackberry documented in the last three years near water. A targeted foliar spray with a dilute concentration of glyphosate and the surfactant Agridex will be used near water. As with all spray operations in Yosemite, an indicator dye will be used to ensure the treatment crews can readily see the sprayed area and avoid non-target impacts. Crews will not spray plants that overhang water. Plants that overhang water will be treated with a cut and dab method, as will areas of other high sensitivity. Cut and dab treatments have not been quite as effective as foliar treatments, but still provide acceptable results. Cut and dab involves painting glyphosate concentrate onto the stub of a plant stem within 10 minutes of cutting the stem.

Maps of known Yosemite blackberry populations known in Yosemite are available with the 2010 planning maps at <http://www.nps.gov/yose/naturescience/invasive-plant-management.htm>

Blue elderberry. Crews may now use foliar herbicide treatments to control invasive plants located over 30' from the dripline of blue elderberry plants. Outside of the valley longhorn elderberry beetle flight season, the cut and dab method may now treat invasive plants within 30' of the dripline. This will allow crews to protect blue elderberry habitat from Himalayan blackberry from the El Portal area where both of these species are currently common.

Wilderness: Patch size and density restrictions under the 2008 IPMP impeded our ability to use herbicides to manage invasive plant populations in designated wilderness while they were still small enough to be effectively controlled. These restrictions have now been removed. Crews will not have enough time to treat bull thistle populations in wilderness this year before they set seed.

Because of the success of front country blackberry treatments in 2009 and 2010, and the new compliance document, we can begin Himalayan blackberry removal operations in the wilderness. Treatment in the Tuolumne River Watershed below Hetch Hetchy will begin in September.

Signage: Herbicide treatment areas are closed to the public during application. Sprayed areas will be signed according to herbicide product label requirements. The signs will state when a particular herbicide was applied to what target. For glyphosate, the signage period is the time necessary for the product to dry; a few hours at most under normal conditions in Yosemite. In some special use areas, signage may be longer.

Comment [CR1]: not sure about this statement

Pre-emergent The IPMP update was not approved in time to test the efficacy of the herbicide rimsulfuron to control velvet grass in our research plots in Wawona, Big Meadow and Mirror Lake. We will test the efficacy of this pre-emergent on cheatgrass patches in Big Meadow near Foresta in late September of 2011. This experimental work is conducted in collaboration with scientists from the US Geological Survey.